Serial No. 10/663,279 Attorney Docket No. 400.219US01 Title: RUNTIME FLASH DEVICE DETECTION AND CONFIGURATION FOR FLASH DATA

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IN THE CLAIMS

- (Currently Amended) A method of operating a memory device driver comprising:
 querying at least one memory device to discover the memory type by reading a memory
 ID code stored in the memory device; and
 - configuring the driver to access the at least one memory device according to the discovered memory type by matching the discovered memory type to an entry in a memory type data table a table and loading parameters from the table entry that matches the discovered memory type, wherein the memory type data table contains a plurality of table entries, each table entry corresponding to a different memory type, and where the table is compiled with the memory device driver;
 - wherein the table is not stored on the at least one memory device and is modifiable to update the entries of memory types and parameters without requiring recompilation.
- 2. (previously presented) The method of claim 1, wherein querying at least one memory device to discover the memory type by reading a memory ID code stored in the memory device further comprises querying at least one Flash memory device to discover the memory type.
- 3. (original) The method of claim 2, wherein the at least one Flash memory device is one of a NOR Flash and a NAND Flash.
- 4. (original) The method of claim 2, wherein querying at least one memory device to discover the memory type further comprises writing to an address of the memory device and reading a response from the address.
- 5. (original) The method of claim 2, wherein querying at least one memory device to discover the memory type further comprises querying a common Flash interface (CFI) of the memory device.

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- 6. (original) The method of claim 2, wherein querying at least one memory device to discover the memory type further comprises querying a protection register of the memory device.
- 7. (previously presented) The method of claim 1, wherein querying at least one memory device to discover the memory type by reading a memory ID code stored in the memory device further comprises querying an addressable memory ID stored in the memory device.
- 8. (previously presented) The method of claim 1, wherein querying at least one memory device to discover the memory type by reading a memory ID code stored in the memory device further comprises querying an architecture feature of the memory device.
- 9. (original) The method of claim 1, wherein the driver contains at least one of a low level driver, a data manager, and a file manager.
- 10. (Currently Amended) The method of claim 1, wherein configuring the driver to access the at least one memory device according to the discovered memory type by matching the discovered memory type to an entry in a memory type data table a table and loading parameters from the table entry that matches the discovered memory type further comprises configuring the driver to access the at least one memory device with low level driver operation parameters and memory device command sequences to match the discovered memory type.
- 11. (Currently Amended) The method of claim 1, wherein configuring the driver to access the at least one memory device according to the discovered memory type by matching the discovered memory type to an entry in a memory type data table a table and loading parameters from the table entry that matches the discovered memory type further

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comprises configuring the driver to access the at least one memory device with data manager parameters and procedures to match the discovered memory type.

- 12. (Currently Amended) The method of claim 1, wherein configuring the driver to access the at least one memory device according to the discovered memory type by matching the discovered memory type to an entry in a memory type data table a table and loading parameters from the table entry that matches the discovered memory type further comprises configuring the driver to access the at least one memory device with file manager parameters and procedures to match the discovered memory type.
- 13. (cancelled)
- 14. (previously presented) The method of claim 1, wherein the table contains at least one of a low level driver configuration, a data manager configuration, and a file manager configuration.
- 15. (previously presented) The method of claim 1, wherein the table contains one or more entries for a selected memory type, where each of the one or more entries contains a different access data model.
- 16. (cancelled)
- 17. (Currently Amended) A method of operating a system comprising: querying at least one Flash memory device coupled to a host to discover the memory type by reading a device ID and/or manufacturer code stored in the Flash memory device; and
 - configuring a driver routine executing on the host to access the at least one Flash memory device according to the discovered memory type by loading parameters from an entry in a memory type data table a table that matches the discovered memory type, wherein the memory type data table contains a plurality of table entries, each table

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entry corresponding to a different memory type, and where the table is compiled with the memory device driver;

wherein the table is not stored on the at least one Flash memory device and is modifiable to update the entries of memory types and parameters.

- 18. (original) The method of claim 17, wherein the at least one Flash memory device is one of a NOR Flash and a NAND Flash.
- 19. (original) The method of claim 17, wherein an interface to the Flash memory device is one of a PCMCIA-ATA, a Compact Flash (CF), a USB Flash, MemoryStick, and a multimedia card (MMC) compatible interface.
- 20. (previously presented) The method of claim 17, wherein querying at least one Flash memory device coupled to a host to discover the memory type by reading a device ID and/or manufacturer code stored in the Flash memory device further comprises querying a protection register of the Flash memory device.
- 21. (previously presented) The method of claim 17, wherein querying at least one Flash memory device coupled to a host to discover the memory type by reading a device ID and/or manufacturer code stored in the Flash memory device further comprises querying a memory ID stored in the Flash memory device.
- 22. (previously presented) The method of claim 17, wherein querying at least one Flash memory device coupled to a host to discover the memory type by reading a device ID and/or manufacturer code stored in the Flash memory device further comprises querying a common Flash interface (CFI) of the Flash memory device.
- 23. (previously presented) The method of claim 17, wherein querying at least one Flash memory device coupled to a host to discover the memory type by reading a device ID

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and/or manufacturer code stored in the Flash memory device further comprises issuing a Flash command to an address and reading the result from the address.

- 24. (Currently Amended) The method of claim 17, wherein configuring a driver routine executing on the host to access the at least one Flash memory device according to the discovered memory type by loading parameters from an entry in a memory type data table a table that matches the discovered memory type further comprises configuring the driver routine to access the at least one Flash memory device with operation parameters and memory device command sequences to match the discovered memory type.
- 25. (Currently Amended) The method of claim 17, configuring a driver routine executing on the host to access the at least one Flash memory device according to the discovered memory type by loading parameters from an entry in a memory type data table a table that matches the discovered memory type further comprises configuring the driver routine to access the at least one Flash memory device with memory management routines to match the discovered memory type.
- 26. (cancelled)
- 27. (cancelled)
- 28. (original) The method of claim 17, wherein the host is one of a processor and an external memory controller.
- 29. (Currently Amended) A method of configuring a driver comprising: querying at least one Flash memory device to discover the memory type; and configuring the driver to access the at least one memory device according to the discovered memory type by matching the discovered memory type to an entry in a memory type data table a table and loading parameters from the table entry that matches the discovered memory type, wherein the memory type data table contains a

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plurality of table entries, each table entry corresponding to a different memory type, and where the table is compiled with the memory device driver;

wherein the table is not stored on the at least one Flash memory device and where the table is updateable.

- 30. (original) The method of claim 29, wherein the at least one Flash memory device is one of a NOR Flash and a NAND Flash.
- 31. (original) The method of claim 29, wherein an interface to the Flash memory device is one of a PCMCIA-ATA, a Compact Flash (CF), a USB Flash, MemoryStick, and a multimedia card (MMC) compatible interface.
- 32. (previously presented) The method of claim 29, wherein querying at least one Flash memory device to discover the memory type further comprises querying a protection register of the Flash memory device.
- 33. (previously presented) The method of claim 29, wherein querying at least one Flash memory device to discover the memory type further comprises querying a common Flash interface (CFI) of the Flash memory device.
- 34. (previously presented) The method of claim 29, wherein querying at least one Flash memory device to discover the memory type further comprises writing to an address of the Flash memory device and reading a result on the address.
- 35. (original) The method of claim 29, wherein the driver contains at least one of a low level driver, a data manager, and a file manager.
- 36. (previously presented) The method of claim 29, wherein querying at least one Flash memory device to discover the memory type further comprises querying at least one

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Flash memory device to discover the memory type to read a device ID and/or manufacturer code stored in the Flash memory device.

- 37. (previously presented) The method of claim 29, wherein the table contains at least one of a low level driver configuration, a data manager configuration, and a file manager configuration.
- 38. (previously presented) The method of claim 29, wherein the table contains one or more entries for a selected memory type, where each of the one or more entries contains a different access data model.
- 39. (previously presented) The method of claim 29, wherein an access data model for the at least one Flash memory is selected from the table.
- 40. (Currently Amended) A system comprising: at least one Flash memory device; and
 - a host coupled to the at least one Flash memory device, wherein the host is adapted to query the at least one Flash memory device to read a device ID and/or manufacturer code stored in the Flash memory device and configure a driver routine to access the at least one Flash memory device in response to the query by matching the discovered device ID and/or manufacturer code to an entry in a memory type data table a table and loading parameters from the memory type data table entry that matches the device ID and/or manufacturer code;
 - wherein the memory type data table contains a plurality of memory type data table
 entries, each table entry corresponding to a different memory type; and
 wherein the table is not stored on the at least one Flash memory device and is modifiable
 to update the entries.
- 41. (original) The system of claim 40, wherein the at least one Flash memory device is one of a NAND Flash and a NOR Flash.

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42. (original) The system of claim 40, wherein an interface to the Flash memory device is one of a PCMCIA-ATA, a Compact Flash (CF), a USB Flash, MemoryStick, and a multimedia card (MMC) compatible interface.

- 43. (original) The system of claim 40, wherein the host is one of a processor and an external memory controller.
- 44. (original) The system of claim 40, wherein the host is adapted to query a protection register of the Flash memory device.
- 45. (previously presented) The system of claim 40, wherein the host is adapted to query a memory ID stored at a specific address in the Flash memory device.
- 46. (original) The system of claim 40, wherein the host is adapted to query a common Flash interface (CFI) of the Flash memory device.
- 47. (original) The system of claim 40, wherein the host is adapted to query an address of the Flash memory device.
- 48. (Currently Amended) A machine-usable medium, the machine-usable medium containing a software routine for causing a processor to execute a method, wherein the method comprises:
 - querying at least one Flash memory device to read a device ID and/or manufacturer code stored in the Flash memory device to discover the memory type; and
 - configuring a driver to access the at least one Flash memory device according to the discovered memory type by matching the discovered device ID and/or manufacturer code to an entry in a memory type data table a table and loading parameters from the memory type data table entry that matches the device ID and/or manufacturer code;

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wherein the memory type data table contains a plurality of memory type data table
entries, each table entry corresponding to a different memory type; and
wherein the table is not stored on the at least one Flash memory device and is modifiable
to update the entries.

- 49. (original) The machine-usable medium of claim 48, wherein an interface to the at least one Flash memory device is one of a PCMCIA-ATA, a Compact Flash (CF), a USB Flash, MemoryStick, and a multimedia card (MMC) compatible interface.
- 50. (previously presented) The machine-usable medium of claim 48, wherein querying at least one memory device to read a device ID and/or manufacturer code stored in the Flash memory device to discover the memory type further comprises querying a protection register of the Flash memory device.
- 51. (previously presented) The machine-usable medium of claim 48, wherein querying at least one memory device to read a device ID and/or manufacturer code stored in the Flash memory device to discover the memory type further comprises querying a memory ID stored in the array of the Flash memory device.
- 52. (previously presented) The machine-usable medium of claim 48, wherein querying at least one memory device to read a device ID and/or manufacturer code stored in the Flash memory device to discover the memory type further comprises querying a common Flash interface (CFI) of the Flash memory device.
- 53. (Currently Amended) A system comprising: at least one Flash memory device; and
 - a host coupled to the at least one Flash memory device, wherein the host comprises a means for detecting a Flash memory type of the at least one Flash memory device by reading a memory ID code stored in the Flash memory device and comprises a means for configuring a driver to access the at least one Flash memory device in response to the Flash memory type detected by the means for detecting by matching the memory

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ID code to an entry in <u>a memory type configuration data an data</u> storage means and loading parameters from the entry;

wherein the memory type configuration data storage means contains plurality of memory type driver configuration data entries, each entry corresponding to a different memory type; and

wherein the memory type configuration data an data storage means is not stored on the at least one Flash memory device and is modifiable to update the entries.